

**Federal Railroad Administration  
Information Technology Five-Year Plan  
Executive Summary**

Immediate access to people and data is critical to the management of the Federal Railroad Administration's (FRA) programs, especially in the area of safety. The FRA is challenged by a new era of railroad safety responsibilities. Information handling is more complex due to the increase in railroad mergers, new safety regulations, the amounts and variety of network traffic, new railroad equipment, advanced train control systems, and the FRA's new systematic approach to safety. Large volumes of and types of data need to be transmitted to the FRA and stored, processed, and distributed effectively and efficiently. To this end, the FRA must achieve an advanced information technology architecture that will provide the FRA with the automation tools necessary to meet its mission and goals.

The Federal Railroad Administration (FRA) Information Technology (IT) Five Year Plan contains organizational initiatives, plans, accomplishments, and projected funding for each individual computer and telecommunications system in the Administration. It also describes the overall thrust of FRA's IT Architecture Development Process over the next five years.

A major goal of the FRA for FY-2000 and beyond is to use IT more cost-effectively and efficiently and to advance the precepts of the Clinger-Cohen and Paperwork Reduction Acts. FRA will do this by focusing on:

- C standardizing and improving its technology infrastructure (including its internal network);
- C ensuring that its systems are compatible, interoperable, and secure and are compliant with Federal regulations and Department of Transportation (DOT) policies;
- C providing employees with the necessary IT to improve productivity and to communicate more easily with colleagues and customers; and
- C establishing a system for selecting and evaluating investments in emerging IT technologies to improve program performance and cost controls.

In support of this goal our key objectives in FY-2000 and beyond are to:

- \$ continually improve our business processes and data flow through pro-active assessments ( such as business process re-engineering) and the implementation of effective solutions;
- \$ migrate toward an intelligent network infrastructure;
- \$ establish and maintain an integrated information infrastructure;

- \$ setup an FRA Intranet;
- \$ implement a data warehouse; and
- \$ implement a new high speed network backbone.

Although we significantly improved communications within FRA in FY-1998 with the installation of the FRA's Wide Area Network (WAN), the FRA's IT system was very limited in terms of capabilities. In FY-1999 we began expanding our capabilities by stabilizing the existing IT network infrastructure and by correcting deficiencies identified in an independent assessment. The work accomplished in FY-1999 has established the cornerstone for enhancing the IT infrastructure in follow-on phases. Our major accomplishments in FY-1999 include:

**\$ A successful stabilization of the networking infrastructure- Phase One :**

- < Implemented an enterprise wide virus protection scheme by installing Inoculan Virus Software on all servers, desktop and laptop personal computers at headquarters and in the field.
- < Implemented Internet Protocol (IP).
- < Replaced antiquated file servers in headquarters and the field.
- < Incorporated a new Office of Safety Web server into the FRA network.
- < Migration from Hub technology to 100basedT Switched technology on 90% of our LAN/WAN.
- < Improved the performance and data integrity of the Controlled Correspondence Manager (CCM) Plus application with the replacement of its server. CCM is a critical application of the FRA's Administrator's Office and the Office of Safety.
- < Enhanced data recovery and integrity by implementing a backup system and strategy in the FRA regional office.

**\$ Improved electronic mail and calendaring:**

- < Successfully migrated from GroupWise 4.1 to GroupWise 5.5.

Information Technology at the FRA in FY-2000 and beyond will be used to:

- \$ design a more effective network and routing configuration;
- \$ enhance server architecture and processing capabilities;
- \$ provide a more efficient and cost-effective LAN and WAN architecture
- \$ provide reliable computing and networking device performance;
- \$ save processing time and reduce costs;
- \$ increase productivity with ready access to agency data;
- \$ enable collaboration within and between multiple departments; and
- \$ empower employees to access agency resources anywhere and anytime.